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Advancing the institutional perspective on informal entrepreneurship: a study of formalisation intentions amongst street entrepreneurs

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Abstract:

Purpose

Informal entrepreneurship is seen as a direct outcome of either the failure of formal institutions or the asymmetry between formal and informal institutions. These two viewpoints are so far debated as alternative theoretical explanations for the prevalence of informal entrepreneurship. In this paper, we offer a theoretically integrative approach to further advance the institutional perspective of informal entrepreneurship.

Design/methodology/approach

Using face-to-face surveys of 322 street entrepreneurs from Lahore, Pakistan, we deploy the hitherto unused Partial Least Square approach to Structural Equation Modelling (PLS-SEM) to analyse data within the field of informal entrepreneurship.

Findings

The empirical findings strongly support the theoretical propositions of the new institutional perspective that we present in our paper. We find no direct impact of factors like procedural justice, redistributive justice and public sector corruption (i.e. formal institutional failings) on the formalisation intentions of street entrepreneurs. Our findings demonstrate that the relationship between formal institutional failings and formalisation intentions can only be explained through the mediating role of institutional asymmetry (i.e. tax morality).

Research Limitations/Implications

From a policy perspective, we find that if we can encourage street entrepreneurs to obtain a local-level registration as the first step toward formalisation, it will significantly increase their chances to opt for higher national-level registrations.

Originality/Value

This paper presents a unique attempt to further understand the context of street entrepreneurship through the theoretical lens of institutional theory. In doing so, it synthesises the arguments of existing institutional perspectives and further develops the institutional theory of informal entrepreneurship. Moreover, the paper develops the concept of 'formalisation intentions'.

Keywords: Institutional theory, Formalisation intentions, Street vendors, Pakistan

1. Introduction

Over the last decade, informal entrepreneurship has emerged as a salient sub-category of entrepreneurship scholarship (Welter *et al.*, 2015) given the pervasiveness of this entrepreneurial activity across the globe. This paper specifically focuses on an essential facet of global informal entrepreneurship, namely *street vending* or *hawking*, or what is here termed as ‘street entrepreneurship’ (Williams and Gurtoo, 2012). According to an estimate, the accumulative size of the global street vending activity is worth approximately USD10 trillion (Neuwirth, 2012), which is second to only the two largest economies of the world. Street entrepreneurs are here defined as individuals who offer goods and/or services for sale at a public space, which is not originally intended for trading, without having a permanent built-up structure from which to sell (Williams and Gurtoo, 2012). Street entrepreneurs can be stationary in the sense that they can occupy a fixed space on a pavement or any other private/public space or mobile so that they move from place to place to sell their goods (Bhowmik, 2010). Furthermore, street entrepreneurs in emerging market economies are largely informal as they choose to remain, either fully or partially, unregistered under specific forms of national and local-level legislation, e.g. tax and social security laws, business permits acts and/or commercial acts (ILO, 2012). Focusing on street entrepreneurship, this paper problematises the dominant conceptualisation of entrepreneurship as an economic phenomenon exclusively reserved for a select group of individuals and limited to certain privileged contexts and settings (see also, Afreh *et al.*, 2019). Instead, responding to the call by Sabella and El Far (2019), it addresses the need for scholarly work that focuses on everyday entrepreneurial activities enacted by ordinary individuals in a marginalised context, a perspective that is inadequately addressed in the existing literature (Baker and Welter, 2017).

The scholarly and policy discourse on street entrepreneurship presents very dichotomous views. On the one hand, street entrepreneurs are deemed parasitic, or at best inefficient; and street vending is described as a disorderly activity that crowd-outs the urban space, creates pedestrian and vehicular congestion, evades taxes and poses “unfair competition” to tax-paying off-street businesses (Xue and Huang, 2015; Lyon, 2007). As such, it is viewed as something to be eradicated. On the other hand, in an alternative scholarly discourse, street entrepreneurship is viewed as a conduit of entrepreneurial opportunities and as a source to learn and demonstrate many entrepreneurial skills (De Soto, 1989; Williams and Gurtoo, 2012). Street vending is now seen as an activity of entrepreneurialism which potentially acts as a conduit for marginalized individuals to enhance their economic empowerment and bring meaningful social change (Sabella and El Far, 2019). As such, street entrepreneurship in this positive conceptualization is now viewed as a potential source of state tax revenue mainly through licensing fees, taxes levied on the consumption or income of the street vendors, as well as through sales and value-added taxes charged by the vendors and subsequently paid to the government (Lin, 2018). Tackling street entrepreneurship akin to other forms of informal entrepreneurship through any types of rent extraction, has thus become a core agenda for supranational agencies and governments worldwide (European Commission, 2007; ILO, 2014; OECD, 2012).

Recently, scholars have increasingly adopted the lens of institutional theory when explaining the prevalence of informal entrepreneurship (e.g., Webb *et al.*, 2009; Welter *et al.*, 2015; Williams and Shahid, 2016), yet hitherto the discourse of street entrepreneurship remains completely deficient of an institutional perspective (see De Castro *et al.*, 2014 for an exception), which forms the focus of this article. In doing so, our research offers several theoretical contributions. Firstly, drawing on the institutional theory (Di Maggio and Powell,

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3 1983; Scott, 2008), we offer a new theorization of informal entrepreneurship. According to
4 institutional theory, institutions define the rules of the game within a society which essentially
5 govern the behaviour of the individuals living in that society (North, 1990). Moreover, all
6 societies have both formal institutions (i.e., codified laws and regulations) that set out the legal
7 rules of the game, as well as informal institutions which are the unwritten socially shared rules
8 that exist outside of officially sanctioned channels (Helmke and Levitsky, 2004), and are the
9 norms, values and beliefs held by citizens and entrepreneurs reflecting their individual morale
10 about what is right and acceptable (Denzau and North, 1994). Viewed through an
11 institutionalist lens, two perspectives have so far dominated the theoretical discourse of
12 informal entrepreneurship. In the first institutional perspective, informal entrepreneurship is
13 explained as resulting from the failures and imperfections of formal institutions (e.g rules, laws
14 and policies of the state). Three institutional factors that are overly discussed in the literature
15 as underlying reasons for the failure and inefficiencies of formal institutions, which in turn is
16 deemed responsible for the growth of informal entrepreneurship, are redistributive justice
17 (Shahid *et al.*, 2020; Williams, 2020; Windebank and Horodonic, 2017; Verboon and Goslinga,
18 2009), procedural justice (Murphy *et al.*, 2016; Gobena and Van Dijke, 2016; Faizal *et al.*,
19 2019) and public sector corruption (Williams *et al.*, 2016; Gangl *et al.*, 2015; Wallace and
20 Latcheva, 2005). In this first institutional perspective, however, the focus has been almost
21 entirely upon formal institutions when explaining the prevalence of informal entrepreneurship.
22 A second institutional perspective (Siqueira *et al.*, 2016; Webb *et al.*, 2014) thus emerged,
23 asserting that focusing solely on formal institutions to explain informal entrepreneurship does
24 not account for the role played by informal institutions, i.e. socially shared norms, values and
25 beliefs of the entrepreneurs, Therefore, greater attention is paid to informal institutions, and
26 informal entrepreneurship is here seen as resulting from the ‘asymmetry’ between formal and
27 informal institutions (De Castro *et al.*, 2014; Webb *et al.*, 2009). This institutional asymmetry
28 is largely measured as a change in the ‘tax morality’ of the entrepreneurs.
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34 In this paper, we further advance the institutional theory on informal entrepreneurship
35 by offering a theoretically integrative perspective. We synthesize the existing institutional
36 viewpoints and thus offer a more nuanced explanation of entrepreneurship in the informal
37 sector. To date, the first two institutional perspectives are presented as two separate and
38 alternative explanations for the prevalence of informal entrepreneurship. We present a third
39 institutional perspective, arguing that informal entrepreneurship is not solely produced by
40 institutional asymmetry *per se*; neither is it the direct outcome of formal institutional failings.
41 Instead, it is the failure of formal institutions, reflected as the lack of redistributive justice, low
42 procedural fairness and public sector corruption, which essentially produces institutional
43 asymmetry, i.e. low tax morality (Horodonic and Williams, 2016; Ahmed and Braithwaite,
44 2005), and that then leads to the greater prevalence of informal entrepreneurship (Williams and
45 Franic, 2016; Torgler and Schneider, 2009). In sum, in order to further advance the institutional
46 view of informal entrepreneurship, we hypothesise that institutional asymmetry mediates the
47 relationship between formal institutional failings and the prevalence of informal
48 entrepreneurship. This mediating role of institutional asymmetry, and hence the weaving of the
49 first two institutional perspectives, becomes even more so valid in the developing country
50 context of our study, which is almost always characterised by weak formal institutions and low
51 tax morality.
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55 Secondly, this paper examines the behaviour of street entrepreneurs with regard to two
56 different and independent forms of registration so as to examine whether their compliance at a
57 specific level might be a precursor for their compliance with higher-order regulations. We
58 know from previous qualitative studies that street entrepreneurs tend to behave differently
59 regarding their compliance with local- and national-level legislation, generally preferring the
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3 former over the latter for strategic reasons (e.g. De Castro *et al.*, 2014). There is, however, no
4 quantitative inquiry of this proposition to date. Thus, we intentionally incorporate two varying
5 registrations in our analytical model - one local (vending license) and the other national
6 (registration with the tax authority). By doing so, our study extends the literature of informal
7 entrepreneurship beyond the conventional binary (formal vs informal) perspective. We rather
8 argue that formalisation might actually become a self-propelling pursuit for informal
9 entrepreneurs, whereby they move from lower to higher orders of compliance.
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12 This article poses two questions for present research:

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14 *Firstly, do the institutional determinants of one form of compliance differ from*
15 *the other form of compliance for street entrepreneurs?*

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17 *Secondly, if we can encourage street entrepreneurs first to attain a local-level*
18 *registration (i.e. vending license), does it increase their likelihood of attaining a*
19 *national-level registration (i.e. tax registration) as a result?*
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21 Finally, this study offers the novel concept of ‘formalisation intentions’ in a context
22 where the default state of the enterprises (i.e., street hawkers) is such that they all operate as
23 wholly informal entities and thus exhibit no discernible variation in their levels of formality.
24 Otherwise, most previous studies on informal entrepreneurship have focused on evaluating the
25 level of formality of entrepreneurs and what causes them to exist at varying levels of formality
26 (Shahid *et al.*,2020; Williams and Shahid, 2016). Although, in theory, street entrepreneurs
27 may also exist anywhere on a continuum ranging from wholly formal to wholly informal, most
28 in lived practice in developing economies inhabit a position towards the wholly informal end
29 of the spectrum. The scenario was no different in the case of our study, where 98% (316 out of
30 322) of the street entrepreneurs lacked any form of registration and thus were operating as
31 wholly informal enterprises. Therefore, any form of a statistical notion based on their ‘level of
32 formality’ would have been inconsequential. This study, as a result, for the very first time
33 examines the ‘formalization intentions’ of entrepreneurs, i.e., their intent to formalise their
34 businesses, instead of their actual level of formality, the phenomenon understanding of which
35 has relevant policy implications. Drawing support from Ajzen’s (1991) Theory of Planned
36 Behaviour (TPB), we argue that intentions are the single best predictor of an individual’s
37 behaviour. When behaviour is rare or difficult to observe, intentions would serve as a conduit
38 to better understand the ‘act’ itself (Krueger *et al.*,2000; Liñán and Chen, 2009). Using an
39 institutionalist lens and drawing on the arguments of TPB thus, we analyse the determinants of
40 what is here termed as ‘formalisation intentions’ to be a predictor of street entrepreneurs’
41 likelihood to actually formalize their business in a situation when almost every one of them is
42 currently operating as a fully informal enterprise. Hitherto, no known study has sought to
43 empirically assess formalization intentions *per se*, either from an institutional perspective or
44 beyond.
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49 The following section reviews the three institutional perspectives that seek to explain
50 informal entrepreneurship. From this, our research hypotheses are generated. The second
51 section describes the data used, a 2019 survey of 322 street vendors operating in Lahore,
52 Pakistan, and the Partial Least Squares approach to Structural Equation Modelling (PLS-SEM)
53 used for data analysis. The third section reports the results and discussion, followed by final
54 sections discussing the theoretical and policy implications, conclusions, the limitations of the
55 study and future research areas.
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2. Theoretical Foundations and Hypotheses Development

Why people choose to obey or disobey decisions made by institutions has been a topic of research for quite a long time in the literature of public policy (Wenzel, 2002). Reviewing the literature on informal entrepreneurship and the tax non-compliant behaviour of citizens, two competing theories emerge. There is the ‘rational economic actor’ approach (Horodnic and Williams, 2018), or what is also referred to as ‘rational choice model’ (Murphy, 2003) and/or ‘economic self-interest model’ (Wenzel, 2002). On the other hand, there is the ‘social actor’ approach (Williams, 2020) or ‘accommodative’/‘attitudinal’ model in the literature (Murphy, 2003, 2005).

The rational economic actor approach has its roots in the seminal work of Allingham and Sadmo (1972) and has dominated the discourse of informal entrepreneurship. It views the participants of the informal economy as mainly driven by profit-seeking and self-interest. The advocates of this approach argue that individuals will only comply and formalise when they see the benefits of compliance as superseding the cost of non-compliance. The rational economic actor approach and its implied regulatory approach of deterrence is, however, heavily criticised for its excessive focus on “individual outcome maximization” and being “overly individualist” (Kaplanoglou and Rapanos, 2015). As a result, in the past few years, an alternative ‘social actor’ approach has emerged, which focuses on engendering voluntary compliance by developing a social contract between the entrepreneurs and government instead of forcing them to comply using deterrents. Researchers have suggested that ‘attitudes’ and ‘moral obligations’, instead of pure economic calculations and fear of punishment, are important, and thus nurtured, to ensure compliance and formalisation (Braithwaite 2002; Murphy, 2005). Most recently, within this social actor or attitudinal approach, scholars have begun to apply an institutional lens to explain the informal economy in general and informal entrepreneurship in particular. Literature presents two institutional perspectives that dominate the discourse of informal entrepreneurship in this regard.

First institutional perspective: formal institutional failures and weaknesses

In the first institutional perspective numerous formal institutional failures, such as the lack of redistributive and procedural justice (Murphy, 2005; Braithwaite *et al.*, 2007), public sector corruption (Siqueira *et al.*, 2016), over or little regulation by formal institutions (De Soto, 1989); weak enforcement of law by formal institutions (Shahid *et al.*, 2020) and formal institutional instability and uncertainty (Levitsky and Murillo, 2009), and their impact on informal entrepreneurship is studied. For the purpose of this study, we build our hypotheses around three formal institutional failures, in particular, namely procedural justice, redistributive justice and public sector corruption. Each of these institutional factors is discussed below.

The concepts of procedural and redistributive justice and their impact on people’s decision to obey or disobey the law is grounded in Tyler’s theory of compliance (Tyler, 1990). According to Tyler and Smith (1998), people’s behaviour towards compliance and informality is rooted in their views about *justice* and *fairness*. The procedural justice literature demonstrates that people’s reaction to their experiences with public authorities is rooted in their evaluation of the fairness, trustworthiness, interpersonal respect and impartiality of the procedures used by those agencies to exercise their authority (Murphy *et al.*, 2016). The literature on tax compliance (Feld and Frey, 2002; Farrar, 2015), and informal entrepreneurship in general (Molero and Pujol, 2012; Williams and Shahid, 2016), has suggested that the taxpayers and entrepreneurs who perceive decisions enacted by the tax and other public

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3 authorities as high in procedural justice show, as a result, an increased willingness to voluntary
4 compliance with tax regulations and other related laws. In addition to procedural justice,
5 redistributive justice also seems to have a strong correlation with the level of informality and
6 compliance. Redistributive justice represents how entrepreneurs perceive that the public goods
7 and services they receive are commensurate with the taxes and other contributions they pay to
8 the government (Van Dijke *et al.*, 2019; Richardson and Sawyer, 2001). Drawing inspiration
9 from the equity theory of Walster *et al.*, (1978), the redistributive justice framework (Wenzel,
10 2003), calls for a socially just allocation of rewards and costs by the government for their
11 citizens, or what is referred to as exchange equity (Verboon and Goslings, 2009). The higher
12 the perceived exchange equity amongst entrepreneurs, the higher the level of voluntary
13 compliance amongst them (Shahid *et al.*, 2020; Williams, 2020). Besides exchange equity,
14 other dimensions of redistributive justice, known as horizontal equity and vertical equity, are
15 also identified with respect to their relationship with the prevalence of informal
16 entrepreneurship. Horizontal equity refers to the comparison of one's own cost-to-benefit ratio
17 of their payments to the government with that of others within their own social group,
18 community or industry, while vertical equity concerns their comparison with other social
19 groups (Wenzel, 2002). People who believe that they pay more taxes but receive fewer
20 benefits in return with respect to others (horizontal or vertical inequity) tend to be less
21 compliant with tax and other laws (e.g. Shahid *et al.*, 2020; Williams, 2020).
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27 Developing countries, such as Pakistan, are typically characterised by weak formal
28 institutions whereby entrepreneurs' perceptions of redistributive justice and procedural fairness
29 remain dismally low (Mair and Marti, 2009; Prasad, 2012). While in developed countries the
30 relationship between citizens and state authorities is often harmonious (Maciejovsky *et al.*,
31 2012; Molero and Pujol, 2012; Alon and Hageman, 2013) there remains a clear breach of social
32 contract and trust between the state and its citizens in developing countries. In such contexts,
33 entrepreneurs tend to view business registration and tax payments as a burden rather than a
34 contribution to a common good (Asaminew, 2010; Gobena and van Dijke, 2016). First of all,
35 regressive tax regimes in developing countries tend to place a disproportionate tax burden on
36 certain businesses and the poorer segments of society. In Pakistan, for instance, around 60% of
37 the revenues come from indirect taxes (e.g. sales tax, customs duty and withholding taxes)
38 rather than direct taxes (e.g. income tax), which are regressive in nature, making both the poor
39 and rich pay the same percentage of taxes on their consumption of goods and services (Bukhari
40 and Haq, 2021; Khan and haq Padda, 2021). Such reliance on indirect taxes in a developing
41 country is yet another manifestation of inefficient formal institutions that fail to bring new
42 businesses into the tax net and rather keep burdening the ones who have already registered,
43 giving rise to a strong sense of unfairness and injustice amongst those who complied. This
44 notion of an inequitable tax regime is further reinforced by the disproportionate distribution of
45 taxes across different economic sectors in the country. The manufacturing sector, for example,
46 makes up 12.5% of GDP, but it pays 34.5% of all the direct taxes in the country. Meanwhile,
47 the agriculture, the sector that employs nearly half of the country's population and contributes
48 almost 22% of GDP, and whose profits go largely to the rich landowners and wealthy
49 parliamentarians, remains almost exempted from all forms of direct and indirect taxes.
50 Similarly, large corporate businesses use aggressive tax avoidance strategies (Ahmed and
51 Rider, 2013), particularly, the loopholes in tax policy to claim tax exemptions against activities
52 that are at times falsely classified as corporate social responsibility. Kemal (2010), for example,
53 notes how large corporate entities in Pakistan falsely show a considerable part of their incomes
54 coming from agriculture and other exempted or zero-rated sectors. In sum, the tax system in
55 Pakistan and the relevant institutions, in their current state, are inefficient and unfair.
56 Therefore, the redistributive potential of formal institutions has not been realized, both because
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3 the resulting system overburdens the poor while providing privileges to a wealthy few, and
4 because it does not generate sufficient revenue for the provision of quality public goods and
5 services. Consequently, we tend to witness a growth in the size of the informal economy in the
6 context of a developing country, such as Pakistan.
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9 Based on the above discussion and the theoretical underpinnings of the first
10 institutional perspective, therefore, we hypothesize the following:
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12 *H1a: Lack of procedural justice has a negative impact on street entrepreneurs' intent to*
13 *register for tax.*

14 *H1b: Lack of procedural justice has a negative impact on street entrepreneurs' intent to obtain*
15 *the vending license.*
16

17
18 *H2a: Lack of redistributive justice has a negative impact on street entrepreneurs' intent to*
19 *register for tax.*

20 *H2b: Lack of redistributive justice has a negative impact on street entrepreneurs' intent to*
21 *obtain the vending license.*
22

23
24 In addition to the lack of justice and fairness that may exist in the procedures and resource
25 distribution of public authorities, another form of formal institutional failure that is largely
26 discussed as an antecedent of informality is public sector corruption. It is argued that informal
27 entrepreneurship is a direct outcome of resource misallocations and inefficiencies resulting
28 from the corrupt behaviour of government officials (Wallace *et al.*, 2006). Most importantly,
29 corruption persists through the misuse of a public office for private gains, whereby a corrupt
30 government official would demand bribes, gifts, or undue payments from firms or individual
31 entrepreneurs for favours in return, such as helping in obtaining operating licences and permits
32 and avoiding delays or regulatory inspections (Pope, 2000). In developing countries, at times
33 corruption takes the form of an additional tax for formal entrepreneurs leading them to exit the
34 formal economy and operate in the informal economy to avoid such extortion from public
35 officials, with Pakistan being no exception to the rule (e.g. Williams and Shahid, 2016; Gulzar,
36 2010). Another form of corruption which is relatively rarely studied in the informal
37 entrepreneurship literature is when the entrepreneur him/herself uses their personal connections
38 or influence to gain preferential access to public goods and services, such as lobbying to gain
39 access to contracts, getting better utility connections or bypassing of formal procedures in
40 business activities etc. According to Mughal (2012), in Pakistan, there is massive corruption
41 both on the part of government officials and business owners. In either of these forms,
42 corruption is found to have a deleterious effect on the perceived legitimacy of formal
43 institutions and hence on the willingness to pay taxes in developing countries (Gangl *et al.*,
44 2015; Levi *et al.*, 2009; Cummings *et al.*, 2009).
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50 Many empirical studies from developing countries have suggested that corruption does not
51 only reduce the overall tax collection (Dreher and Schneider, 2010) but also destroys one's
52 trust in the honesty of fellow citizens (Dong *et al.*, 2012; Levi *et al.*, 2009). If government
53 officials are suspected of pocketing revenues meant for public welfare, and if other citizens are
54 believed to pay bribes instead of taxes, it severely damages one's own willingness to comply
55 with state laws and regulations. Hence, corruption in the case of developing countries weakens
56 personal and social norms of compliance and may result in a vicious cycle of informality
57 (Gangl *et al.*, 2015). Corruption amongst government officials thus fuels informality, which in
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turn fuels even more corruption. This positive relationship between corruption and informality is not only widely recognized in the context of Pakistan (e.g. Khuong *et al.*, 2021; Shahid *et al.*, 2020; Williams *et al.*, 2016), but in many other developing countries as well (e.g. Maddah and Sobhani, 2014; Ali *et al.*, 2014). In certain cases, on the contrary, in developing countries, a rise in corruption is rather found to be associated with a higher level of formality. It seems to be the case when the transactional costs of paying bribes are potentially more than the cost of formality and hence formalisation is viewed by entrepreneurs as a conduit to escape corrupt government officials (Le *et al.* 2020; Darkwa-Amanor *et al.*,2007). However, as more commonly the case in a developing country corruption deprives the state of the funds it needs to maintain quality governance, which in turn severally limits its capacity to ensure a just and fair redistribution of wealth amongst its citizens and hence leads to higher informality (Khan, 2020).

Therefore, we hypothesize that:

H3a: Public sector corruption has a negative impact on street entrepreneurs' intent to register for tax.

H3b: Public sector corruption has a negative impact on street entrepreneurs' intent to obtain a vending license.

Second institutional perspective: informal institutions and institutional asymmetry

The focus in the first institutional perspective was almost entirely on examining the effect of formal institutions and how the failure or weaknesses of these institutions is related to the prevalence of informal entrepreneurship. The extant literature pays very little attention to the role of informal institutions in this perspective. In reality, however, it has been realised that in situations (typically in developing countries) characterised by weak or failed formal institutions, businesses or entrepreneurs turn to informal institutions, that are represented by norms, values and beliefs, for their guidance and execution of business activities. This is because these informal rules of the game are seen as being more accessible, inclusive and long-lasting as compared to the ever-changing, unfair and punitive rules of formal institutions. Based on the recognition of this prominent role played by informal institutions, the second institutional perspective transcends beyond simply formal institutional failings and imperfections and brings into focus the role played by cognitive and normative cultural institutions, combined together to represent informal institutions (Godfrey, 2015; North, 1990; Scott, 2008). According to this perspective, informal entrepreneurship is explained mainly as an outcome of institutional asymmetry that may exist between formal institutions (i.e. state's codified laws and regulations) and informal institutions (i.e. entrepreneur's socially shared norms, values and beliefs). If formal and informal institutions are not aligned, which is commonly the case in developing countries, it gives rise to informal entrepreneurship that, although formally illegal, is deemed socially legitimate (Siqueira *et al.*, 2016; Webb *et al.*, 2014). The powerful role of informal institutions in shaping entrepreneurial behaviour such that entrepreneurs do not only engage in informal practices but also thrive in such ventures is now widely recognised especially in the marginalised contexts of developing countries, such as Pakistan (Muhammad *et al.*, 2016).

In this second institutional perspective, it is important to assess what is deemed as socially legitimate by informal institutions to explain informal entrepreneurship. One helpful

avenue is to measure entrepreneurs' tax morale. Tax morality, defined as the individual's intrinsic motivation to pay taxes (Torgler and Schneider, 2009), is widely seen to provide a measurement of the gap between the formal institutions (state morale) and informal institutions (civic morale), and hence represents the degree of asymmetry between formal and informal institutions (Horodnic and Williams, 2016). Existing research suggests a strong correlation between the level of tax morale and an entrepreneur's propensity to engage in informal activities; or the higher the tax morale, the lower the prevalence of informal entrepreneurship (Torgler and Schneider, 2009). Tax morale, in turn, is found to be positively associated with factors including trust in government and judiciary as well as the level of dissatisfaction with public services (Daude *et al.*, 2013). Based on these theoretical underpinnings of the second wave of institutional theory, and using tax morale as an indicator for institutional asymmetry, we, therefore, hypothesize that:

H4a: Low tax morality has a negative impact on street entrepreneurs' intent to register for tax.

H4b: Low tax morality has a negative impact on street entrepreneurs' intent to obtain the vending license.

Third integrative institutional perspective: institutional asymmetry as an outcome of formal institutional failures:

The first two institutional perspectives can be marked in terms of their varying focus on formal and informal institutions as the primary determinants of informal entrepreneurship. However, advancing the institutional theory of informal entrepreneurship, we argue that it is neither the formal nor informal institutions on their own that can better explain informal entrepreneurship. It is rather how they correlate with each other in a given context that offers a better explanation for the prevalence of informal entrepreneurship. Instead of being viewed as alternative views, the two institutional perspectives outlined above shall be synthesised to develop what is here termed as a third institutional perspective (see Figure 1 for our conceptual model). In this new perspective, we theorise that informal entrepreneurship is not solely a result of institutional asymmetry or institutional failings and imperfections *per se*. Rather, it is the formal institutional failings and imperfections that produce an institutional asymmetry, which then leads to a higher prevalence of informal entrepreneurship. The way in which formal institutional failings and imperfections, however, produce institutional asymmetry is a multifaceted process that would vary depending on different institutional environments and whether there exists a substitutive or complementary relationship between the formal and informal institutions in a given context and place.

In some institutional contexts, such as when formal and informal institutions are complementary, and thus aligned, formal institutional failings may not lead to the greater prevalence of informal entrepreneurship. This, however, although hypothetically a possibility, is here considered not to be generally the case in most institutional environments and entrepreneurial ecosystems. This argument might work, for instance, in some long-standing and slow-to-change developed economies where the formal institutions over many decades have managed to both shape and be shaped by, the informal institutions so that they become complementary through a process of iterative shaping of each other. In such a scenario, formal institutional failings and imperfections *per se* do not necessarily result in a higher degree of non-compliance and hence increased informality, if there exists an alignment between formal and informal institutions. It is so because having faced problems of formal institutional imperfections, as prescribed in the first institutional perspective, entrepreneurs tend to turn to informal institutions for their moral compass, which if aligned with the formal code of law, would still promote a compliant behaviour. However, much more commonly in developing

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3 countries, formal and informal institutions are substitutive, meaning that formal institutional
4 failings and imperfections produce institutional asymmetry which in turn results in the
5 acceptability and prevalence of informal entrepreneurship. It is this dependent, rather than an
6 independent, relationship between the variables of the first two institutional perspectives and
7 their eventual effect on informality, which gives rise to the need for a more synthesised view.
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10 Hence, to advance this third institutional perspective and to test whether formal
11 institutional failings and imperfections, measured as a lack of redistributive and procedural
12 justice, and public sector corruption, lead to institutional asymmetry, we examine the mediating
13 effects of tax morality (proxy measure of institutional asymmetry) on formalization intentions.
14 This analysis will help test the synthesising of the existing institutional perspectives by
15 elucidating the impact of redistributive justice, public sector corruption and procedural justice
16 on tax morality, which is here theorized as subsequently impacting the level of compliance.
17 Therefore, we hypothesize that:
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19
20 *H5a: Tax morality mediates the impact of procedural fairness, redistributive justice and*
21 *corruption on street entrepreneurs' intent to register for tax.*

22 *H5b: Tax morality mediates the impact of procedural fairness, redistributive justice and*
23 *corruption on street entrepreneurs' intent to obtain a vending license.*
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27 **Insert Figure 1 here**
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31 32 **3. Methodology**

33 34 *Research Context*

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38 Street vending plays a vital role in the economy of developing countries, especially
39 since it stands as a conspicuous activity in the informal sector (Recchi, 2020; Beccles, 2014).
40 According to an estimate, there are over a million street vendors in Pakistan contributing
41 around \$2 billion to the national economy¹. Moreover, according to the 2016 Gallup Survey of
42 Pakistan, 75% of the Pakistani households stated that they have easy access to street vendors
43 and roadside stalls. This shows that the urban poor in Pakistani cities are largely dependent on
44 street vending not only because it is an important source of employment for them but also for
45 its ability to provide commodities that are cheaper than formal markets and stores.
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49 Despite the significant size and importance of this economic activity in the urban
50 economy of Pakistan, street vending remains a neglected area for policymakers, academia,
51 society and donors' circles. From the policy viewpoint, little to no attention has been paid to
52 this crucial trade in Pakistan. Instead of regularising and developing a policy framework for
53 street vendors, successive governments have resorted to stringent anti-encroachment measures
54 against urban street vending activities. The most recent and glaring example was a massive
55 drive in October 2018 backed by the orders of the Supreme Court of Pakistan to remove all
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59 ¹ [https://nation.com.pk/29-Nov-2019/ehsaas-programme-to-be-implemented-by-engaging-45-govt-
60 agencies](https://nation.com.pk/29-Nov-2019/ehsaas-programme-to-be-implemented-by-engaging-45-govt-agencies)

street vending activity obstructing pedestrian and vehicular movements in Karachi, the largest city of the country. It resulted in the removal of approximately 9,000 street vendors, including 82 women vendors (Hasan, 2021). While the existing regulatory framework in this regard articulates the licensing requirements and the related penalties in case of violations, a comprehensive framework including rights, privileges and entitlements of street vendors is still not clear. Consequently, in the absence of proper legal protection, street vendors in Pakistan are often faced with incidents of harassment and abuse as well as confiscation of their property by public officials (Moosvi, 2021). In the city of Lahore, the site of this investigation, street vendors are subject to two mandatory legal obligations for them to conduct their business legally. First, they should register with the provincial tax authority² and obtain a National Tax Number (NTN). Second, they must obtain the vending license from the municipality corporation of the area in which they wish to do business. The vending license restricts the street vending activity to a specific locality and is subject to renewal after every 1-2 years depending on the locality.

Data Collection:

For data collection, face-to-face surveys were conducted by two hired research associates with the aid of a structured questionnaire. Given the low literacy level of street vendors in Pakistan and their lack of familiarity with the English language, the survey questionnaire was translated in Urdu by the first author for whom Urdu is a mother tongue.³ Following a pilot survey of 20 street vendors in October 2019, the main survey was conducted during November-December, 2019 culminating in 322 respondents. Participant selection was undertaken via maximum variation sampling technique, an alternative to random probability sampling method, that allows researchers to gather data in situations where the sample population is either invisible or difficult to access (Williams and Gurtoo, 2012; Verzhinina and Rodionova, 2011). This was achieved by the socio-spatial segmentation of the city into six zones ranging from high income to low-income areas. In order to gain access and ensure diversity, each zone was further identified for 2-3 clusters of street vendors within it. Subsequently, the street vendors were approached for the survey in these clusters. While deciding which participants to choose for the survey, a diversity was maintained in terms of the product and premises (mobile vs. stationary) type. The outcome was a representative sample of participants consisting of street vendors selling varying products in different areas of the city using different modes (see Table I).

Examining the characteristics of our 322 survey participants, Table I reveals that the majority of street vending revolved around the sale of perishable products, such as instantly consumable food items, vegetables and fruits, followed by garments and accessories. Almost 80% of the street vendors were mobile or 'itinerant' as they sold goods via mobile and/or temporary structures by walking around, while the remaining operated through a fixed stall on the roadside or in a market. Statistics also revealed that street vending was more concentrated in specific demographic groups than others. For example, almost 96 % of our sample consisted of males and majority of them were middle-aged (between 20-40 years of age) and had no formal education. On average, street vendors worked for 10-20 hours per day for 6-7 days per week. Although, the majority of the street vendors in our study earned a monthly income of between PKR 10,000-20,000, a significant percentage of them (28 % approximately) reported to be earning more than PKR 20,000, with 7% of them were even earning more than

² <http://pra.punjab.gov.pk/>

PKR30,000, which was considerably more the National Minimum Wage of Pakistan³ at the time of the survey.

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Insert Table I here

Measurement of Latent Variables:

Our proposed research model consists of six latent variables assessed by a total of 13 items, as depicted in Figure 2. The latent variables are: Formalization Intentions License, Formalization Intentions Tax, Redistributive Justice, Procedural Justice, Tax Morality and Public Sector Corruption. Table II presents the construction and internal reliability statistics for the six latent variables.

Dependent Latent Variables:

Formalization Intentions

The scale of formalization intentions (FI) was adapted from prior research on entrepreneurial intentions (EI). More specifically, we adapted scales from one of the most widely used measures developed by Jaen and Lin'an (2013). Our model has two dependent latent variables capturing different dimensions of the formalisation intentions of street vendors: (a) Formalization Intentions for License, which captures the street vendors' willingness to obtain the vending license, (b) Formalisation Intentions for Tax, which essentially captures their level of willingness to register with the tax department. For each of these variables, responses were recorded on a two-item scale using a five-point Likert scale ranging from 1 – 'strongly disagree' to 5 – 'strongly agree'.

Independent Latent Variables:

Redistributive Justice

Using the conceptualisations laid out by Richardson and Sawyer (2001), we develop a three-item scale to measure redistributive justice. The three items recorded each vendor's agreeableness to the quality of public services, utilities, road infrastructure and other business services that they received from the government. Each of the three items was measured on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Procedural Justice

Drawing upon Murphy's (2005) theorisation of procedural justice, we construct a three-item scale to measure procedural justice. The street entrepreneur's response to how strongly they believed that government authorities treated them with respect, were accessible to them for problem resolution and addressed their complaints fairly were recorded. All the three items

³ National Minimum Wage in Lahore, Pakistan at the time of survey = 15 000 PKR.

were measured on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Public Sector Corruption

As used elsewhere in the literature (Williams *et al.* 2015; Knack, 2007), we used perceived corruption as a measure of public sector corruption. This variable takes the form of a single item latent variable construct⁴. A three-point Likert scale was used to ask our respondents to indicate if they believed that the government departments were corrupt and asked for bribes (1 = strongly disagree; 2 = somewhat agree; 3 = strongly agree).

Tax Morality:

Using the conceptualisations offered by Torgler and Schneider (2009) we constructed the latent variable of tax morality by using a two-item scale measuring the level of street entrepreneurs' trust in the government and legal system of Pakistan. A five-point Likert scale was used ranging from 1 (a lot of trust) to 5 (no trust at all) for each of the two items.

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Insert Table II here

Measurement of Control Variables:

Consistent with the extant literature, we controlled for a number of demographic and enterprise related characteristics found in previous research on informal entrepreneurship. First, we controlled for certain individual-level characteristics, including gender, a dummy equal to '1' if the respondent was a female (Williams and Gurtoo, 2012); age and education, both ordinal variables consisting of five categories each ranging from the lowest to highest category (Gennari, 2004); and monthly income, an ordinal variable ranging from 1 to 5 where 1 = under PKR 5000 and 5 = over PKR 30,000 (Shahid *et al.*, 2020). Second, amongst enterprise-related characteristics, we controlled for the age of business, a continuous variable measuring the number of years since the person started street vending (Thai and Turkina, 2014); product type, a categorical variable with nine categories, including instantly consumable food, balloons, flowers, fruits and vegetables, jewellery and accessories etc. (Williams *et al.*, 2016); premises types, a categorical variable consisting of three categories where 1 = Hawking/mobile vendor, 2 = Temporary stall on the road/market and 3 = Permanent stall on the road/market (Bhwomik, 2005).

Data Analysis:

In order to test our hypotheses, we used the Partial Least Squares approach to Structural Equation Modeling (i.e., PLS-SEM). SmartPLS version 3.2.6 software was used for our analysis. Multiple factors inform our choice of PLS SEM for testing our hypotheses. First, PLS-SEM remains an appropriate method for prediction-oriented research that is aimed at explaining the endogenous variables for theory building instead of theory testing (Wong, 2013). Second, our data is not normally distributed, which violates the covariance-based SEM assumptions; however, PLS-SEM successfully addresses this concern as it does not rely on normality assumptions. Third, PLS-SEM has higher accuracy and statistical power as compared to covariance-based SEM for the case of small sample sizes (Lu *et al.*, 2011). Finally,

⁴ PLS SEM can successfully estimate single item constructs as part of the model without causing identification and convergence problems as compared to the covariance-based SEM (Garson, 2016).

PLS-SEM is a more rigorous estimation technique as compared to regression analysis, which assumes error free measurement and normality (Hair et al, 2013).

PLS-SEM follows a two-step approach to model estimation. First, the *measurement model*, also called the outer model, is assessed, which essentially depicts the relationships between each latent variable and its associated items or indicators. At this stage, we assessed the measurement model consisting of six latent and eight control variables using PLS algorithm. Second, the *structural model*, also called the inner model, is estimated using the bootstrap resampling procedure as advised by Chin (1998). The structural model of our analysis describes the relationships between different latent variables including the hypothesized mediating effects as depicted in Figure 2.

Assessment of Model Quality:

Prior to estimation, the model quality is ensured by testing for internal consistency reliability, convergent and discriminant validity, and Pearson zero order correlations.

Internal Consistency Reliability

In order to check the reliability of latent variables in our structural model, two complementary checks were carried out. First, using the criterion of Fornell and Larcker (1981), we checked for the composite reliability (CR) of all our latent constructs, which was comparable to Cronbach's alpha and should be higher than 0.70 (Nunnally, 1978). Next, the outer standardized factor loadings were estimated to assess the individual item's reliability for each variable. Factor loadings exceeding the threshold of 0.70 were considered reliable (Henseler *et al.*, 2009). All the factor loadings and CR values were within the acceptable range (see Table II).

Convergent and Discriminant Construct Validity

Next, we checked for the convergent validity of our latent variable constructs by estimating their Average Variance Extracted (AVE) value. An AVE value of higher than 0.50 was deemed acceptable suggesting that the variable explains at least 50% of the variation of its indicators (Gotz et al, 2009). Furthermore, the discriminant validity of our latent constructs was assessed using the criterion of Fornell and Larcker (1981) according to which a latent variable should share more variance with its assigned indicators than with any other latent variable. To test this, the square root of AVE of each latent variable should be greater than the inter-construct Pearson zero-order correlations. As depicted in Table II and III, the convergent and discriminant validity of our constructs is well established. In addition, to further confirm the discriminant variability of our constructs, we also calculated the heterotrait-monotrait (HTMT) ratio of correlations. With all the HTMT values of our model being less than 0.85 (Henseler *et al.*, 2015) - the highest one observed was 0.41 between tax morality and redistributive justice - the discriminant validity of our latent constructs was well established (see Table IV).

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Insert Table III here

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Insert Table IV here

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Multicollinearity

To assess any potential collinearity issues of our inner model, we check for the Variance Inflation Factor (VIF) values. All VIF values fall approximately below the threshold of '5' (Hair et al., 2013), and hence, no critical issues of multicollinearity are detected amongst our variables.

The Standardized Root Mean Square Residual (SRMR)

The SRMR is a measure of the approximate fit of the research model that captures the difference between the observed correlation matrix and the correlation matrix implied by the model. Results of our model fit test showed an SRMR value of less than 0.08 (i.e. 0.05), and hence, indicate a good model fit (Hu and Bentler, 1998).

Common Method Bias Test

To check for the presence of common method bias, Kock's (2015) post hoc statistical technique based on the analysis of variance inflation factors (VIF) of the inner structural model is used. All VIFs are found to be below the standard of 3.3 (Kock, 2015), therefore no evidence of strong pathological collinearity or common method bias is observed.

4. Results

In order to assess the extent of each variable's contribution to the explained variance of the endogenous variables in our model, the significance, magnitude and sign of each of the path coefficients (β values) were calculated using the bootstrapping method. Table V and Figure 2 report the significance of the direct, indirect and total effects as well as the coefficients β for each path of our structural model.

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Insert Table V here

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Insert Figure 2 here

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Firstly, we analyse the hypotheses formed under the purview of the first institutional perspective. In this regard, our findings highlight that both procedural and redistributive justice does not have any significant direct impact on street entrepreneurs' intentions to either register with the tax department or obtain the vending license, which thus rejects hypotheses H1a, H1b, H2a and H2b. Meanwhile, whereas public sector corruption has a significant but counterintuitive effect on formalisation intentions for tax ($\beta=0.164$, $p<0.05$), no significant effect is observed at all between public sector corruption and street entrepreneurs' intentions

to obtain the vending license. Essentially, it rejects both hypotheses H3a and H3b. Turning to the hypotheses developed using the theoretical underpinnings of the second institutional perspective, we examine the direct impact of institutional asymmetry (i.e. tax morality) on the formalization intentions of street entrepreneurs. Results indicate that low tax morality, as indicated by a higher value on the Likert scale, has a moderately significant and negative direct effect on street entrepreneurs' likelihood to register with the tax department. Likewise, there appears to be an even more significant and negative relationship ($\beta = -0.139$, $p < 0.05$) between low tax morality and street entrepreneurs' intentions to obtain a vending license. Hence, both hypotheses H4a and H4b are supported.

Next, we analyse the mediating role of tax morality between our latent independent variables and formalization intentions for tax and license. Our model yields (1) highly significant effects of public sector corruption ($\beta = 0.154$, $p < 0.05$), redistributive justice ($\beta = -0.294$, $p < 0.01$), and procedural justice ($\beta = -0.229$, $p < 0.01$) on tax morality; (2) a significant effect of tax morality as a mediator on street entrepreneurs' intent to obtain the vending license ($p < 0.05$) and a moderately significant effect on their intentions to register with the tax department. Also, looking at the indirect effect column of Table V, we find a moderately significant indirect effect of public sector corruption, procedural justice and redistributive justice *via* tax morality as a mediator. The findings of our study, thus, confirm both hypotheses H5a and H5b. To further elucidate the mediating effect of tax morality, we ran two post-hoc models separately with only one dependent variable added at a time, Model B and Model C, the results of which were then compared with the *direct effects model*, i.e. the model without any mediator (Model D; see Table VI).

Starting with Formalisation Intent for License as the single dependent variable, the results of Model B illustrate a significant mediating effect of tax morality. Likewise, turning to Formalisation Intent for Tax as the dependent variable, our results of Model C also yield significant effects of public sector corruption, redistributive justice and procedural justice on tax morality, which further strongly mediates the relationship ($\beta = -0.155$, $p < 0.05$) between these latent variables and entrepreneurs' intentions to register with the tax department. It is also important to note that the models with the mediating variable – Model B and C – have a higher percentage of variance explained ($R^2 = 0.13$ and $0.14 > R^2 = 0.10$ and 0.11 as compared to the model without mediation, i.e. Model D. Nevertheless, our hypothesized Model A (Fig II) still yields the highest percentage of variance explained ($R^2 = 0.14$ and 0.22 , see Table V) as compared to the other models. It shows that the presence of tax morality as the mediating variable clearly improves the predictive validity of our models.

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Insert Table VI here

Finally, looking at the correlation between the two dependent variables of our model – formalization intent license and formalization intent tax – our study offers a striking result. We identify a highly significant correlation between the two dependent variables, whereby street entrepreneurs' willingness to obtain the vending license seems to positively impact their chances of registering with the tax department as well ($\beta = 0.212$, $p < 0.01$), but the relationship does not seem to hold in the opposite ($\beta = 0.212$, $p > 0.1$). In the end, amongst the control variables, premises type illustrated a moderately significant but negative impact on both formalization intentions for license ($\beta = -0.139$, $p < 0.1$) and tax ($\beta = -0.115$, $p < 0.1$), indicating

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3 that mobile vendors are less likely to formalise as compared to those with a temporary stall on
4 the street. Moreover, qualification also has a significant positive effect on vendors' intentions
5 to obtain the tax registration, but not the vending license. All the other control variables remain
6 insignificant.
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10 5. Discussion

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13 With this article, we further advance the institutional theory on informal entrepreneurship
14 by offering a theoretically integrative perspective. Synthesizing the existing institutional
15 perspectives of informal entrepreneurship and drawing support from the arguments of the
16 Theory of Planned Behaviour, this study provides a novel explanation of the mechanism
17 through which formal institutional factors affect the formalisation intentions of street
18 entrepreneurs. Several of our findings are worth discussing.
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21 First, we find no support for the arguments of the first institutional perspective, contesting
22 the view that formal institutional failings and imperfections, represented by the lack of
23 procedural and redistributive justice, and high public sector corruption, directly lead to the
24 prevalence of informal entrepreneurship. Counterintuitively, however, it elucidates that the
25 stronger the perception of public sector corruption amongst street entrepreneurs, the higher
26 their likelihood to register with the tax department. One logical explanation for this
27 counterintuitive finding, as gathered from our informal conversations with these vendors while
28 surveying, is the fact that most of them explained their increased willingness to formalize
29 merely as a conduit to escape the excessive bribes and extortion paid to public officials. For
30 them, by the virtue of their informal status, the cost and disturbance of dealing with corrupt
31 government officials had increased to the extent that they would rather prefer to register
32 themselves and do away with those frequent incidents of harassment. The transactional costs
33 related to bribes are potentially reduced with formalisation for these street entrepreneurs (see
34 also, Le *et al.* 2020; Darkwa-Amanor *et al.*, 2007).
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40 Second, as theorized, our findings offer strong empirical support for the arguments of
41 the second institutional perspective. We find strong support for the direct relationship between
42 the entrepreneur's propensity to operate informally and their level of tax morality (see also,
43 Alm and Torgler and Scheider, 2009; Shahid *et al.*, 2020; Williams *et al.*, 2015). Low tax
44 morality, in this case, indicates an individual's waning trust in the government and rule of law.
45 This direct relationship between formalisation intentions and tax morality, interestingly, is
46 more pronounced in the case of street entrepreneurs' intent to obtain a vending licence (i.e., a
47 local registration) as opposed to registering themselves with the tax department (i.e., a national
48 registration). It means that the effectiveness of tax morality as an antecedent of formality tends
49 to vary according to the level of registration that an entrepreneur is supposed to obtain. In
50 theoretical terms, our findings imply that when there is an asymmetry between formal and
51 informal institutions (De Castro *et al.*, 2014; Webb *et al.*, 2009), as represented by low tax
52 morality, practices will emerge grounded in socially shared norms that may be illegal in terms
53 of formal rules, but are otherwise socially acceptable and legitimate (Gangl *et al.*, 2015; Levi
54 *et al.*, 2009; Cummings *et al.*, 2009; Siqueira *et al.*, 2016; Webb *et al.*, 2014). Informal sector
55 entrepreneurship is one such endeavour. Using the case of street vendors, therefore, this study
56 fully advances the arguments of the second institutional perspective.
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4 Third, our findings identify that tax morality (i.e., institutional asymmetry) very
5 strongly mediates the relationship between formal institutional failings and the intent of street
6 entrepreneurs not only to get licensed but also to register with the tax department. The results
7 of our study, therefore, firmly advance the newly conceptualised third institutional perspective,
8 illustrating the fact that informal entrepreneurship is not a direct outcome of formal institutional
9 failures or inefficiencies *per se*. Rather, it is the failings/imperfections of formal institutions
10 (i.e. low redistributive and procedural justice and high public sector corruption) that produce
11 an asymmetry between formal and informal institutions (i.e, low tax morality), and that then
12 leads to the greater prevalence of entrepreneurship in the informal sector. This is not to suggest
13 that inefficiencies and imperfections of formal institutions have no role to play in determining
14 formalisation intentions. Indeed, for the policymakers to enhance the level of formalisation
15 amongst entrepreneurs, they must first work to ensure the efficient and fair functioning of their
16 institutions. At the same time, however, no matter how efficient and fair the formal institutions
17 are, their efficiency and fairness will not directly predict an entrepreneur's intent to formalise
18 their business. For these institutional improvements to translate into enhanced formalisation
19 intentions, entrepreneurs must first experience a positive change in their tax morality. Thus,
20 while entrepreneurs would be unable to develop formalisation intentions in the absence of
21 efficient and fair formal institutions, it is the tax morality (Horodonic and Williams, 2016;
22 Ahmed and Braithwaite, 2005; Torgler and Schneider, 2009) they derive from such institutions
23 that will ultimately determine their formalisation intentions. This mediating role of tax
24 morality, and hence the weaving of the first two institutional perspectives, becomes even more
25 valid in a developing country context which is generally characterised by weak formal
26 institutions and low tax morality. In practical terms, thus, our findings suggest that if
27 entrepreneurs perceive that they were not treated in a respectful and fair manner by public
28 officials, did not receive an equitable return of the taxes paid and were forced to pay bribes or
29 undue payments in their day-to-day dealings with public authorities, they tend to lose their trust
30 in the government and justice system of the country. It is this loss of trust and morality that
31 then reduces the intent of these entrepreneurs to comply with the prevailing laws and
32 regulations.

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38 Lastly, this study examines the behaviour of informal entrepreneurs with regard to two
39 different and independent forms of registration so as to examine whether their intentions to
40 obtain one form of registration may also affect their intent to obtain the other. If it is so, is there
41 any specific causal relationship that may exist between the two? Informal entrepreneurs are
42 found not only to be selective about their registration choices (e.g. Shahid *et al.*, 2020), but
43 they also tend to show a preference for one over the other (De Castro *et al.*, 2014). In line with
44 these arguments, our study has identified a strong positive correlation between street
45 entrepreneurs' intent to obtain a vending license and tax registration, whereby their attainment
46 of the former strongly predicts their chances of opting for the latter as well. This causality,
47 however, does not hold true for the opposite direction according to our results. It implies that
48 if we can somehow encourage these street entrepreneurs to opt for a local-level registration
49 (e.g. vending license) as the first step towards formalisation, it will very likely increase their
50 chances to opt for higher national-level registrations (e.g. tax registration) as a subsequent step.
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56 6. Policy Implications

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58 The paper's findings clearly have relevance and significance for policy makers, working within
59 the realms of entrepreneurship and enterprise and more specifically within general taxation.
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3 Within policy-making circles, there are existing debates about which policy tools should be
4 used in order to engage with informal forms of entrepreneurship, commonly dichotomised into
5 two camps of using either ‘carrots’ (developing policies to encourage informal entrepreneurs
6 to come ‘out of the shadows’ and formalise their entrepreneurial activities) or ‘sticks’ (using
7 policies to act as tough deterrents to prevent informal forms of entrepreneurship; i.e fines,
8 penalties. Both of these viewpoints maintain the overarching objective of formalising informal
9 activity and as a consequence, the state can capture the lost tax revenues, which were previously
10 unpaid and so the ‘tax gap’ can be to a degree reduced. However, to date, as outlined above,
11 no scholarly work has devoted attention to explicitly focusing on what we describe as
12 ‘formalisation intentions’. Whilst previous studies have measured levels of informal activity,
13 often regularly over time, in an effort to see if any changes have taken place, there has been a
14 failure to more explicitly uncover if there are intentions for informal entrepreneurs to formalise
15 their economic activities. Policymakers now can explore the utility of this novel concept with
16 a view to developing policies at the local and national levels to encourage informal
17 entrepreneurs to come ‘out of the shadows’.

18
19 In terms of policy recommendations for street vending in Pakistan, it is evident from
20 this research that a *cultural change* is required, involving an acknowledgment of the inherently
21 important role of street vending in the web of economic linkages across the country. Rather
22 than focusing upon how to deal with the ‘nuisance’ of street vending, new policies ought to be
23 based on how to foster inclusive spaces that work for all urban stakeholders. Related to this is
24 the need for a *collaborative* approach to policy-making, involving street vendors and their
25 customers: as well as other stakeholders like formal businesses and civil society organisations.
26 Street vendor associations could be established to offer a forum for discussion between traders
27 and government officials. Similarly, *legal protection* is required to provide a set of guiding
28 principles that seek to integrate and harmonise the informal economy with other urban
29 activities (Ehrenfeucht, 2016). An example to follow could be India’s ‘Street Vendors Act
30 2014’, which makes provisions for town vending committees (outlining their
31 roles/responsibilities and minimum presence per zone), allocates specific zones for street
32 vending, procedures for attaining licenses/certificates along with conditions for their
33 cancellation, penalties for failing to meet the bill’s stipulations, and the establishment of a
34 formal authority dedicated to dispute resolution. Finally, there is a need for more readily
35 available *micro-finance* channels for street vendors, who are often poorly educated and are
36 unable to procure documentation to receive formal loans from banks. Government loan
37 schemes, tailored for street vendors could assist in this regard.

48 7. Limitations and Future Research Directions

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50 As with any empirical research, this study has certain limitations, many of which open
51 interesting avenues for future research. First, our study was limited to only one type of
52 enterprise (i.e. street hawkers) and one metropolitan city in Pakistan which limits the
53 generalizability of our findings. To somewhat mitigate this concern, we gathered data from
54 street vendors operating in vastly different markets and neighbourhoods of the city and having
55 a comparable representation of those with fixed premises and mobile units. In addition, we
56 found evidence of heterogeneity in our sample in terms of formalisation intentions and tax
57 morality scores, allowing us to improve the generalizability of our results beyond the context
58 of one particular city. **Nonetheless, it is to be acknowledged that we have used a non-probability**
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sampling technique (i.e. maximum variation sampling), which might not have resulted in a sample that is the best representative of the street hawking population in Lahore. Therefore, it would be interesting to replicate our study in other socio-spatial contexts and populations (e.g. relatively larger enterprises and employed forms of informal work) using a more random selection of study participants to further validate the theoretical propositions of the third institutional perspective proposed here.

Second, our study restricted itself to only a range of institutional-level factors. Further research may like to include personal and enterprise-level factors in our proposed model. For example, it would be very interesting to take a closer look at examining how the relationship between tax morality (Horodonic and Williams, 2016; Ahmed and Braithwaite, 2005) and formalisation intentions is moderated by factors like the entrepreneur's age, gender and education, as well as the income and age of the business. Moreover, researchers may also like to include the constructs of other formal institutional failures in the model, such as state powerlessness, burdensome regulatory regimes, and political and institutional instability, to compare their direct and indirect (via tax morality) effects on informal entrepreneurship and the informal economy in general. Likewise, future studies may enrich our conceptual model by more specifically exploring the concept of tax morality. In doing so, one can factor in other forms of informal institutions to improve the latent variable of tax morality. For example, they may either explore entrepreneurs' trust in more specific formal institutions (e.g. tax authorities, law enforcement agencies, politicians) as a determinant of their tax morality or may consider broader meso-level determinants of tax morality. Third, this study has confined itself to conceptualising the idea of formalisation as being registered only for tax and business license purposes, since these were the only forms of registration applicable to street vending in Lahore. However, when studying more mainstream enterprises, researchers may also like to include other verticals of informality (e.g. labour laws, the status of account keeping, the ownership structure of the business) to further enrich the construct of formalisation intentions. To summarize, we provide a starting point for scholars and policymakers to understand the mediating role of institutional asymmetry between formal institutional failures and formalisation, and hence to advance the existing institutional perspectives of informal entrepreneurship. Many additional avenues of inquiry remain for discussion, and we hope that future research will build on this foundation.

8. Conclusions

This paper set out to further advance the institutional theory of informal entrepreneurship. We recognise that although there has been a burgeoning literature that adopts an institutional approach when explaining entrepreneurship in the informal economy, no known study in this literature has so far applied this approach to understanding a relatively ignored but rapidly growing segment of the informal economy, namely street entrepreneurship. This article has thus provided the first known study (with the exception of a qualitative study by De Castro *et al.*, 2014) that offers an institutional perspective on street entrepreneurship. Furthermore, while most of the studies in the institutional discourse of informal entrepreneurship remain focused on evaluating the impact of various institutional factors on the actual level of formality as practised by the entrepreneurs, a novel concept of 'formalisation intentions' is conceptualised in this paper. By doing so, this study responds to the need identified by Baker and Welter (2017) for scholarly work that looks beyond what is considered the core or 'mainstream' in entrepreneurship research and focuses on everyday entrepreneurial activities enacted by ordinary individuals in a marginalised context, a perspective that is inadequately addressed in the existing literature.

We argue that the existing institutional perspectives of informal entrepreneurship are seen as alternative theorisations and hence fall short of offering a fuller explanation of the said phenomenon in their own right. We thus propose to synthesise the existing institutional perspectives and develop a more nuanced and theoretically integrative explanation of informal entrepreneurship, resulting in the conceptualisation of what we call a third institutional perspective. Using the case of street entrepreneurs in a developing country context and deploying the PLS-SEM technique in the scholarship of informal entrepreneurship, we put forth that it is neither the formal institutional failings nor the asymmetry of informal and formal institutions that can best explain the phenomenon of informal entrepreneurship on their own. Instead, it is the synthesis of the two viewpoints that is warranted such that it is the failure of formal institutions that causes institutional asymmetry, which then leads to informal entrepreneurship. Contrary to the arguments of the first institutional perspective, we identify no direct effect of formal institutional failures, expressed as the street entrepreneur's low perceived procedural and redistributive justice, and high public sector corruption, on their formalisation intentions. Rather, we suggest that this relationship between formal institutional factors and informal entrepreneurship can be explained most effectively if mediated by the factor of tax morality (i.e. institutional asymmetry), be it in the context of a local or national level compliance. As shown, the model containing tax morality as the mediator clearly offers the highest predictive validity as opposed to the ones containing no mediator. Finally, if this paper, as a result, stimulates those adopting an institutional perspective in the research of informal entrepreneurship to shift away from viewing the existing two institutional perspectives as separate from each other and rather take a more theoretically integrative approach, it will have achieved its major objective.

References

- Acs Z., Sameeksha D., Pekka S., et al. (2013) Institutions and the rate of formal and informal entrepreneurship across countries. *Frontiers of Entrepreneurship Research* 35(15): 1–24.
- Afreh, B., Rodgers, P., Vershinina, N., & Williams, C. C. (2019). Varieties of context and informal entrepreneurship: Entrepreneurial activities of migrant youths in rural Ghana. *International Journal of Entrepreneurial Behavior and Research*.
- Ahmed, R.A. and Rider, M. (2013). 'Using Microdata to Estimate Pakistan's Tax Gap by Type of Tax', *Public Finance Review*, 41(3), 334-59
- Ahmed, E., and Braithwaite, V. (2005). Understanding small business taxpayers: Issues of deterrence, tax morale, fairness and work practice. *International small business journal*, 23(5), 539-568.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), 179-211.
- Ali, M., Fjeldstad, O.H. and Sjørusen, I. H. (2014). To pay or not to pay? Citizens' attitudes towards taxation in Kenya, Tanzania, Uganda, and South Africa. *World Development*, 64, 828-842.
- Allingham, M. G., and Sandmo, A. (1972). Income tax evasion: A theoretical analysis. *Journal of public economics*, 1(3-4), 323-338.

1
2
3 Alon, A., and Hageman, A. M. (2013). The impact of corruption on firm tax compliance in
4 transition economies: Whom do you trust?. *Journal of Business Ethics*, 116(3), 479-494.

5
6 Asaminew, E. (2010). The underground economy and tax evasion in Ethiopia: Implications for
7 tax policy. *Unpublished Work. Addis Ababa: Ethiopian Economic Association.*

8
9 Baker, T., & Welter, F. (2017). Come on out of the ghetto, please!–Building the future of
10 entrepreneurship research. *International Journal of Entrepreneurial Behavior & Research.*

11
12 Beccles, R. (2014). Street Vending in Ghana, A solution or a Problem for development. *Global*
13 *Political Economy (Masters Dissertation). University of Kassel, Kassel.*

14
15 Bhowmik, S. K. (2010). Hawkers in the urban informal sector: A study of street vendors in
16 seven cities. *NASVI, New Delhi.*

17
18 Braithwaite, J. (2002). *Restorative justice & responsive regulation.* Oxford University press on
19 demand.

20
21 Braithwaite, V., Murphy, K., & Reinhart, M. (2007). Taxation threat, motivational postures,
22 and responsive regulation. *Law & Policy*, 29(1), 137-158.

23
24 Bromley, R. (2000). Street vending and public policy: a global review. *International Journal*
25 *of Sociology and Social Policy.*

26
27 Bukhari, H. and Haq, I. (2021). Tax Reforms in Pakistan: Historic and Critical View. *The*
28 *Pakistan Development Review*, 60(3), 385-388.

29
30 Chin, W. W. (1998). The partial least squares approach to structural equation
31 modeling. *Modern methods for business research*, 295(2), 295-336.

32
33 Cummings, R. G., Martinez-Vazquez, J., McKee, M. and Torgler, B. (2009). Tax morale
34 affects tax compliance: Evidence from survey and an artefactual field experiment. *Journal of*
35 *Economic Behavior and Organization*, 70, 447-457

36
37 Darkwa-Amanor, A., Klien, S., & Madelung, P. (2007, November). Corruption, Registration
38 of MSMEs, and Their Linkages-New Evidence and Recommendations from Ghana. In *Africa*
39 *Regional Consultative Conference, Accra, Ghana (Vol. 5).*

40
41 Daude, C., Gutiérrez, H. and Melguizo, A. (2013). What drives tax morale? a focus on
42 emerging economies. *Review of Public Economics*, 207(4), pp. 9-40

43
44 DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism
45 and collective rationality in organizational fields. *American sociological review*, 147-160.

46
47 De Castro J.O., Khavul, S. and Bruton, G.D. (2014). Shades of grey: how do informal firms
48 navigate between macro and meso institutional environments? *Strategic Entrepreneurship*
49 *Journal*, 8, pp. 75-94.

50
51 Denzau, A.T. and North, D. (1994). Shared mental models: ideologies and institutions. *Kyklos*,
52 47, pp. 3-30.

53
54 De Soto, H. (1989). *The other path: the invisible revolution in the third world.* New York:
55 Harper and Row.

56
57 Dong, B., Dulleck, U. and Torgler, T. (2012). Conditional Corruption. *Journal of Economic*
58 *Psychology*, 33, 609-627.

- 1
2
3 European Commission (2007) *Stepping up the Fight Against Undeclared Work*. Brussels:
4 European Commission.
5
- 6 Faizal, S. M., Palil, M. R., Maelah, R., & Ramli, R. (2017). Perception on justice, trust and tax
7 compliance behavior in Malaysia. *Kasetsart Journal of Social Sciences*, 38(3), 226-232
8
- 9 Feld, L. P., & Frey, B. S. (2002). Trust breeds trust: How taxpayers are treated. *Economics of*
10 *governance*, 3(2), 87-99.
11
- 12 Fornell, C., and Larcker, D. F. (1981). Evaluating structural equation models with
13 unobservable variables and measurement error. *Journal of marketing research*, 18(1), 39-50.
14
- 15 Fries, S., Lysenko, T. and Polanec, S. (2003). *The 2002 Business Environment and Enterprise*
16 *Performance Survey: results from a survey of 6,100 firms*. EBRD Working Paper no. 84.
17 Available at: www.ebrd.com/pubs/find/index.html (last accessed 6 June 2017).
18
- 19 Gangl, K., Kirchler, E., Lorenz, C., and Torgler, B. (2015). Wealthy tax non-filers in a
20 developing country: Taxpayer knowledge, perceived corruption and service orientation in
21 Pakistan. *Perceived Corruption and Service Orientation in Pakistan*. Available at
22 SSRN: <https://ssrn.com/abstract=2643456> or <http://dx.doi.org/10.2139/ssrn.2643456>
23
- 24 Gamiieldien, F., and Van Niekerk, L. (2017). Street vending in South Africa: An
25 entrepreneurial occupation. *South African Journal of Occupational Therapy*, 47(1), 24-29.
26
- 27 Garson, G. D. (2016). Partial least squares: Regression and structural equation
28 models. *Asheboro, NC: Statistical Associates Publishers*.
29
- 30 Gennari, P. (2004, February). The estimation of employment and value added of informal
31 sector in Pakistan. In *Conference Paper Presented at 7th Meeting of the Expert Group on*
32 *Informal Sector Statistics (Delhi Group), New Delhi* (pp. 2-4).
33
- 34 Gobena, L. B., and Van Dijke, M. (2016). Power, justice, and trust: A moderated mediation
35 analysis of tax compliance among Ethiopian business owners. *Journal of Economic*
36 *Psychology*, 52, 24-37
37
- 38 Godfrey, P.C. (2015). Introduction: why the informal economy matters to management. In:
39 P.C. Godfrey, ed., *Management, society, and the informal economy*. London: Routledge, pp.
40 1-20.
41
- 42
43 Gulzar, A., and N. Junaid. 2010. "What Is hidden, in the hidden Economy of Pakistan? Size,
44 Causes, Issues and Implications." *Pakistan Development Review* 49 (4)
45
- 46 Hair, J. F., Ringle, C. M., and Sarstedt, M. (2013). Partial least squares structural equation
47 modeling: Rigorous applications, better results and higher acceptance. *Long range*
48 *planning*, 46(1-2), 1-12.
49
- 50 Hasan, A. (2021). Karachi's Street Economy. Accessed at:
51 <https://www.dawn.com/news/1599420>
52
53
- 54 Henseler, J., Ringle, C. M., and Sarstedt, M. (2015). A new criterion for assessing discriminant
55 validity in variance-based structural equation modeling. *Journal of the academy of marketing*
56 *science*, 43(1), 115-135.
57
58
59
60

1
2
3 Henseler, J., Ringle, C. M., and Sinkovics, R. R. (2009). The use of partial least squares path
4 modeling in international marketing. In *New challenges to international marketing*. Emerald
5 Group Publishing Limited.

7 Horodnic, A. V., & Williams, C. C. (2018). Informal payments by patients for health services:
8 prevalence and determinants. *The Service Industries Journal*, 38(11-12), 841-855.

10 Horodnic, I. and Williams, C.C. (2016). An evaluation of the shadow economy in Baltic states:
11 a tax morale perspective. *International Journal of Entrepreneurship and Small Business*,
12 28(2/3), pp. 339-358.

14 Hu, L. T., and Bentler, P. M. (1998). Fit indices in covariance structure modeling: Sensitivity
15 to underparameterized model misspecification. *Psychological methods*, 3(4), 424.

17 ILO (2012) *Statistical Update on Employment in the Informal Economy*. Geneva: International
18 Labour Organisation.

20 ILO (2014) *Transitioning From the Informal to the Formal Economy: Report V(1)*,
21 International Labor Conference, 103rd Session (2014). Geneva: ILO.

23 Jaen, I., and F. Linan. (2013). "Work Values in a Changing Economic Environment: The
24 Role of Entrepreneurial Capital." *International Journal of Manpower* 34 (8): 939–960.

26 Kaplanoglou, G., and Rapanos, V. T. (2015). Why do people evade taxes? New experimental
27 evidence from Greece. *Journal of Behavioral and Experimental Economics*, 56, 21-32.

29 Kemal, M.A. (2010). 'Underground Economy and Tax Evasion in Pakistan: A Critical
30 Evaluation', PIDE Research Report 184.

32 Khan, S., and haq Padda, I. U. (2021). The Impact of Fiscal Policy on Income Inequality: A
33 Case Study of Pakistan. *The Lahore Journal of Economics*, 26(1), 57-84.

35 Khan, M. S. (2020). Quality of governance, social capital and corruption: local governance and
36 the Pakistan marketplace. *Review of Social Economy*, 1-30.

38 Khuong, N. V., Shabbir, M. S., Sial, M. S., and Khanh, T. H. T. (2021). Does informal economy
39 impede economic growth? Evidence from an emerging economy. *Journal of Sustainable*
40 *Finance & Investment*, 11(2), 103-122.

42 Knack, S. (2007). Measuring corruption: A critique of indicators in Eastern Europe and Central
43 Asia. *Journal of Public Policy*, 255-291.

45 Kock, N., 2015. Common method bias in PLS-SEM: A full collinearity assessment
46 approach. *International Journal of e-Collaboration (ijec)*, 11(4), pp.1-10.

48 Krueger Jr, N. F., Reilly, M. D., and Carsrud, A. L. (2000). Competing models of
49 entrepreneurial intentions. *Journal of business venturing*, 15(5-6), 411-432.

51 Le, D. T., Malesky, E., & Pham, A. (2020). The impact of local corruption on business tax
52 registration and compliance: Evidence from Vietnam. *Journal of Economic Behavior &*
53 *Organization*, 177, 762-786

- 1
2
3 Lyon, F. (2007). Institutional perspectives on understanding street retailer behaviour and
4 networks. In J. Cross & A. Morales (Eds.), *Street entrepreneurs: people, place and politics in*
5 *local and global perspective* (pp. 164–179). London: Routledge.
- 6
7 Levitsky, S., & Murillo, M. V. (2009). Variation in institutional strength. *Annual Review of*
8 *Political Science*, 12, 115-133.
- 9
10 Levi, M., Sacks, A. and Tyler, T. R. (2009). Conceptualizing legitimacy, measuring
11 legitimating beliefs. *American Behavioral Scientist*, 53, 354-375.
- 12
13
14 Lin, S. L. (2018). We work like ants... we avoid being troublemaker. *International Journal of*
15 *Sociology and Social Policy*.
- 16
17 Liñán, F., and Chen, Y. W. (2009). Development and cross-cultural application of a specific
18 instrument to measure entrepreneurial intentions. *Entrepreneurship theory and practice*, 33(3),
19 593-617.
- 20
21 Lu, I. R., Kwan, E., Thomas, D. R., and Cedzynski, M. (2011). Two new methods for
22 estimating structural equation models: An illustration and a comparison with two established
23 methods. *International Journal of Research in Marketing*, 28(3), 258-268.
- 24
25 Maciejovsky, B., Schwarzenberger, H., & Kirchler, E. (2012). Rationality versus emotions:
26 The case of tax ethics and compliance. *Journal of Business Ethics*, 109(3), 339-350.
- 27
28 Maddah, M., and Sobhani, B. (2014). The effective factors on informal economy in developing
29 countries (panel data model). *International Journal of Regional Development*, 1(1), 12-25
- 30
31 Mair, J., and Marti, I. (2009). Entrepreneurship in and around institutional voids: A case study
32 from Bangladesh. *Journal of business venturing*, 24(5), 419-435.
- 33
34 Molero, J.C. and Pujol, F. (2012). Walking inside the potential tax evader's mind: tax morale
35 does matter. *Journal of Business Ethics*, 105, pp. 151-162.
- 36
37 Moosvi, A. (2021). *Street Vending: An introduction and overview*. PIDE Knowledge Brief,
38 No. 2021:39, Accessed at: [https://pide.org.pk/wp-content/uploads/kb-039-street-vending-an-](https://pide.org.pk/wp-content/uploads/kb-039-street-vending-an-introduction-and-overview.pdf)
39 [introduction-and-overview.pdf](https://pide.org.pk/wp-content/uploads/kb-039-street-vending-an-introduction-and-overview.pdf)
- 40
41 Mughal, M.M. (2012), Reasons of tax avoidance and tax evasion: Reflections from Pakistan.
42 *Journal of Economics and Behavioral Studies*, 4(4), 217-222.
- 43
44 Muhammad, N., Ullah, F., & Warren, L. (2016). An institutional perspective on
45 entrepreneurship in a conflict environment: evidence from Pakistan. *International Journal of*
46 *Entrepreneurial Behavior & Research*
- 47
48 Murphy, K., Bradford, B., and Jackson, J. (2016). Motivating compliance behavior among
49 offenders: procedural justice or deterrence?. *Criminal Justice and Behavior*, 43(1), 102-118.
- 50
51 Murphy, K. (2005). Regulating more effectively: The relationship between procedural justice,
52 legitimacy, and tax non-compliance. *Journal of law and Society*, 32(4), 562-589.
- 53
54 Neuwirth, R. (2012). *Stealth Rise of Informal Economy of Nations: The Global*. New York:
55 Pantheon.
- 56
57 North, D.C. (1990). *Institution, institutional change and economic performance*. Cambridge:
58 Cambridge University Press.
- 59
60

1
2
3 OECD (2012), *Reducing Opportunities for Tax Non-Compliance in the Underground*
4 *Economy*, OECD, Paris.

5
6 Prasad, A. (2012, January). How do Developing Country Entrepreneurs Navigate Extreme
7 Institutional Voids?. In *Academy of Management Proceedings* (Vol. 2012, No. 1, pp. 1-1).
8 Academy of Management.

9
10 Pope, J. (2000). *Confronting corruption: the elements of a national integrity system*. Berlin,
11 Germany: Transparency International Source Book.

12
13 Recchi, S. (2020). Informal street vending: a comparative literature review. *International*
14 *Journal of Sociology and Social Policy*.

15
16 Scott, W.R. (2008). *Institutions and organizations: ideas and interests*. London: Sage.

17
18 Sabella, A. R., and El-Far, M. T. (2019). Entrepreneurship as an everyday form of resistance:
19 An exploration of the experiences of Palestinian women street vendors in the occupied Old
20 City of Jerusalem. *International Journal of Entrepreneurial Behavior and Research*

21
22
23 Shahid, M. S., Williams, C. C., and Martinez, A. (2020). Beyond the formal/informal enterprise
24 dualism: Explaining the level of (in) formality of entrepreneurs. *The International Journal of*
25 *Entrepreneurship and Innovation*, 1465750319896928.

26
27 Siqueira, A.C.O., Webb, J.W. and Bruton, G.D. (2016). Informal entrepreneurship and industry
28 conditions. *Entrepreneurship Theory and Practice*, 40(1), pp. 177-200.

29
30 Thai, M.T.T. and Turkina, E. (2014). Macro-level determinants of formal entrepreneurship
31 versus informal entrepreneurship. *Journal of Business Venturing*, 29(4), pp. 490-510.

32
33 Torgler, B. and Schneider, F. (2009). The impact of tax morale and institutional quality on the
34 shadow economy. *Journal of Economic Psychology*, 30, pp. 228–245.

35
36 Tyler, T. R. (1990). Justice, self-interest, and the legitimacy of legal and political authority.
37 In J. J. Mansbridge (Ed.), *Beyond self-interest* (pp. 171–179). University of Chicago Press.

38
39 Tyler, T. R., & Smith, H. J. (1998). Social justice and social movements. In D. G. Gilbert, S.
40 T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (4th ed.), Vol II) (pp. 595-
41 629). New York: Oxford University Press

42
43
44 Van Dijke, M., Gobena, L. B., and Verboon, P. (2019). Make me want to pay. A three-way
45 interaction between procedural justice, distributive justice, and power on voluntary tax
46 compliance. *Frontiers in psychology*, 16(32).

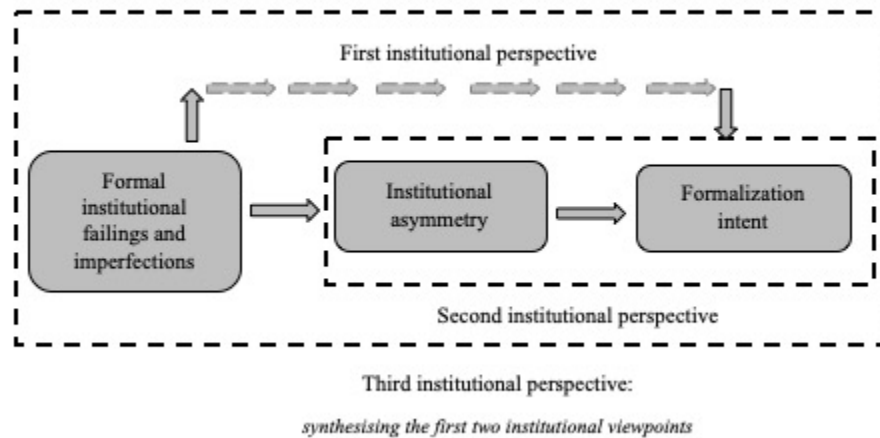
47
48
49 Verboon, P., & Goslinga, S. (2009). The role of fairness in tax compliance. *Netherlands*
50 *Journal of Psychology*, 65(4), 136-145.

51
52 Vershinina, N., & Rodionova, Y. (2011). Methodological issues in studying hidden
53 populations operating in informal economy. *International Journal of Sociology and Social*
54 *Policy*. 31(11/12): 697-716.

55
56 Wallace, C., & Latcheva, R. (2006). Economic transformation outside the law: corruption,
57 trust in public institutions and the informal economy in transition countries of Central and
58 Eastern Europe. *Europe-Asia Studies*, 58(1), 81-102.

- 1
2
3 Walsh, J. (2010). Street vendors and the dynamics of the informal economy: Evidence from
4 Vung Tau, Vietnam. *Asian Social Science*, 6(11), 159-165.
5
6 Walster, E., Walster, G.W. and Berscheid, E. 1978. *Equity: Theory and*
7 *Research*, Boston: Allyn and Bacon.
8
9 Webb J. W, Laszlo T, Duane R. I, et al. (2009) You say illegal, I say legitimate:
10 entrepreneurship in the informal economy. *Academy of Management Review* 34(3): 492–510.
11
12 Webb, J.W., Ireland, R.D. and Ketchen, D.J. (2014). Toward a greater understanding of
13 entrepreneurship and strategy in the informal economy. *Strategic Entrepreneurship Journal*,
14 8, pp. 1-15.
15
16 Welter, F., Smallbone, D. and Pobol, A. (2015). Entrepreneurial activity in the informal
17 economy: a missing piece of the jigsaw puzzle. *Entrepreneurship and Regional Development*,
18 27(5-6), pp. 292-306.
19
20 Wenzel, M. (2002). The impact of outcome orientation and justice concerns on tax compliance:
21 The role of taxpayers' identity. *Journal of applied psychology*, 87(4), 629.
22
23 Williams, C.C., (2020). Evaluating Public Administration Approaches Towards Tax Non-
24 Compliance in Europe. *Administrative Sciences* 10(3), 43
25
26 Williams, C., & Franic, J. (2015). Tackling the propensity towards undeclared work: some
27 policy lessons from Croatia. *South East European Journal of Economics and Business*, 10(1),
28 18-31.
29
30 Williams. C.C. and Shahid, M.S. (2016) Informal entrepreneurship and institutional theory:
31 explaining the varying degrees of (in)formalization of entrepreneurs in Pakistan,
32 *Entrepreneurship & Regional Development*, 28:1-2, 1-25
33
34 Williams, C.C., Shahid, M.S., & Martinez, A. (2016). Determinants of the level of
35 informality of informal micro–enterprises: Some evidence from the city of Lahore, Pakistan.
36 *World Development*, 84, 312–325.
37
38 Williams, C. C., and Gurtoo, A. (2012). Evaluating competing theories of street
39 entrepreneurship: some lessons from a study of street vendors in Bangalore,
40 India. *International Entrepreneurship and Management Journal*, 8(4), 391-409.
41
42 Windebank, J.E. and Horodnic, I. (2017) Explaining participation in undeclared work in
43 France: lessons for policy evaluation. *International Journal of Sociology and Social Policy*, 37
44 (3/4). pp. 203-217
45
46 Wong, K. K. K. (2013). Partial least squares structural equation modeling (PLS-SEM)
47 techniques using SmartPLS. *Marketing Bulletin*, 24(1), 1-32.
48
49 Xue, D., and Huang, G. (2015). Informality and the state's ambivalence in the regulation of
50 street vending in transforming Guangzhou, China. *Geoforum*, 62, 156-165.
51
52
53
54
55
56
57
58
59
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Figure 1. Conceptual model: Synthesizing the institutional perspectives of informal entrepreneurship



Figur 1: Conceptual model: synthesising the institutional perspectives of informal entrepreneurship

171x94mm (72 x 72 DPI)

Table I: Characteristics of the Street Vendors Surveyed

Variables	Frequency	Percentage in sample
Gender	322	
Female	13	4.04
Male	309	95.96
Age	322	
<20 years	24	7.45
20-30 years	125	38.82
30-40 years	106	32.92
40-50 years	51	15.84
50+ years	16	4.97
Qualification	322	
No formal education	112	34.78
Up to 5th grade	110	34.16
Up to 10th grade	73	22.67
Above 10th grade or diploma	22	6.83
University degree	5	1.55
Product Categories	322	
Instantly consumable food items	109	33.85
Fruits and Vegetables	51	15.84
Jewelry and Accessories	53	16.46
Garments and shoes	60	18.63
Services	20	6.21
Crockery and décor	5	1.55
Stationary	13	4.04
Flowers	6	1.86
Balloons	5	1.55
Premises Type	322	
Permanent stall	67	20.81
Mobile structure/ hawking	255	79.19
Average hours worked per day	322	
<5hrs	4	1.24
5-10hrs	84	26.09
10 to 20 hrs	227	70.5
>20hrs	7	2.17
Average days worked per week	315	
1-3 days	19	6.03
3-5 days	10	3.17
6-7 days	286	90.79

Vending Age	314	
1 year	5	1.59
1–5 years	122	38.86
5-10 years	121	38.53
>10 years	66	21.03
Monthly Income	322	
< 5000 PKR	13	4.04
5000-10000 PKR	68	21.12
10000-20000 PKR	152	47.2
20000-30000 PKR	66	20.5
>30000 PKR	23	7.14

Table II: Latent Variables Measurement and Construct Reliability

Latent variables (in bold) and respective measurement items	Outer standardized factor loadings	CR*	AVE*
Formalization Intentions License		0.974	0.949
<i>If a vending license/permit is offered by the government, to what extent do you agree with each of the following statements?</i>			
I am very likely to get the vending license	0.972		
I will seriously consider getting the vending license	0.976		
Formalization Intentions Tax		0.966	0.934
<i>To what extent do you agree with each of the following statements with regards to your registration with Tax department?</i>			
I am very likely to register my business with the tax department	0.969		
I will seriously consider registering my business with the tax department	0.964		
Redistributive Justice		0.793	0.562
<i>To what extent are you satisfied with the following?</i>			
The quality of public services, such as hospitals and education	0.706		
The quality of utilities, such as electricity, gas sewerage and water	0.765		
The quality of road infrastructure and other business services	0.775		
Procedural Fairness		0.855	0.664
<i>To what extent do you agree with the following statements?</i>			
You believe that the government authorities treat you with respect	0.748		
You believe you can easily access government departments for problems related to your business	0.883		
You believe that the government officers listen to your complaints and do their best to resolve them	0.808		

Tax Morality

0.927 0.865

How much trust do you have in the legal system of Pakistan? 0.951

How much do you trust the government of Pakistan? 0.907

Public Sector Corruption*To what extent do you agree with the following statement?*

You believe that government departments are corrupt and ask for bribe (Yes/No) Single item construct

*CR stands for Composite Reliability and AVE stands for Average Variance Extracted.

Table III: Correlations and Discriminant Validity*

	VIF	1	2	3	4	5	6
1 Public Sector Corruption	1.51	1					
2 Formalization Intent License	1.14	0.021	0.974				
3 Formalization Intent Tax	2.39	0.087**	0.219***	0.967			
4 Procedural Fairness	2.21	-0.125	0.058	0.172***	0.815		
5 Redistributive Justice	3.78	-0.218	-0.007	0.091	0.22*	0.749	
6 Tax Morality	1.84	0.254***	0.069	-0.156***	-0.291***	0.305*	0.93
<i>Control Variables</i>							
Age		-0.112*	-0.082	-0.045	0.001	-0.075	0.018
Gender		-0.079*	0.024	0.055	0.051	0.029	-0.13*
Monthly Income		-0.062	0.077	0.142**	-0.013	-0.049	0.032
Economic Vulnerability		0.066	-0.083	-0.101*	-0.043	-0.106	0.008
Premises Type		0.041	-0.136*	-0.193***	-0.018	-0.025	0.046
Product Type		-0.018***	-0.067	0.023	0.015	0.016	-0.038
Qualification		0.041	0.116*	0.212***	0.037	-0.023	0.022
Vending age		0.005	-0.057	-0.05	0.003	-0.032	0.034

* Correlation is significant at 0.05 level (2 tailed)

** Correlation is significant at 0.01 level (2 tailed)

*** Correlation is significant at 0.001 level (2 tailed)

Note: The diagonal of the matrix above displays the square root of each construct's Average Variance Extracted (bold) while the inter-construct Pearson zero-order correlations are displayed off-diagonal.

Table IV: HTMT Criterion

		1	2	3	4	5	6
1	Public Sector Corruption						
2	Formalization Intent License	0.022					
3	Formalization Intent Tax	0.09	0.233				
4	Procedural Fairness	0.147	0.075	0.193			
5	Redistributive Justice	0.289	0.075	0.15	0.338		
6	Tax Morality	0.275	0.08	0.166	0.353	0.414	

Table V: Structural Model Estimation with both Dependent Variables (complete Model A)

Paths between two latent variables		Path Coefficients R ² = 0.14 (intent license), 0.22 (intent tax)		
From	To	Direct Effects	Indirect Effects	Total Effects
Formalization Intent License	→ Formalization Intent Tax	0.212***		0.212***
Public Sector Corruption	→ Formalization Intent License	0.006	0.021	0.027
Public Sector Corruption	→ Formalization Intent Tax	0.164 **	-0.029* (via Tax Morality)	0.141**
Public Sector Corruption	→ Tax Morality (<i>the mediator</i>)	0.154**		0.154**
Procedural Justice	→ Formalization Intent License	0.113	-0.032	0.081
Procedural Justice	→ Formalization Intent Tax	0.12	0.043* (via Tax Morality)	0.18**
Procedural Justice	→ Tax Morality (<i>the mediator</i>)	-0.229***		-0.229***
Redistributive Justice	→ Formalization Intent License	0.01	-0.041	-0.03
Redistributive Justice	→ Formalization Intent Tax	0.045	0.055* (via Tax Morality)	0.094
Redistributive Justice	→ Tax Morality (<i>the mediator</i>)	-0.294 ***		-0.294***
Tax Morality (<i>the mediator</i>)	→ Formalization Intent License	-0.139**		-0.139** ¹

1					
2					
3	Tax Morality (<i>the mediator</i>)	→ Formalization Intent Tax	-0.186*		-0.186* ²
4					
5					
6					
7					
8					
9					
10	<i>Control Variables</i>				
11	Age	→ Formalization Intent License	-0.056		-0.056
12					
13	Age	→ Formalization Intent Tax	0.054	-0.02	0.042
14					
15					
16	Gender	→ Formalization Intent License	-0.005		-0.005
17					
18	Gender	→ Formalization Intent Tax	0.033	-0.001	0.031
19					
20	Monthly Income	→ Formalization Intent License	0.01		0.01
21					
22	Monthly Income	→ Formalization Intent Tax	0.066	0.002	0.068
23					
24	Premises Type	→ Formalization Intent License	-0.139*		-0.139*
25					
26	Premises Type	→ Formalization Intent Tax	-0.115*	-0.03*	-0.145**
27					
28	Product Type	→ Formalization Intent License	-0.104		-0.104
29					
30	Product Type	→ Formalization Intent Tax	0.022	-0.022*	0.000
31					
32	Qualification	→ Formalization Intent License	0.073		0.073
33					
34	Qualification	→ Formalization Intent Tax	0.135*	0.016	0.151**
35					
36	Vending age	→ Formalization Intent License	-0.051		-0.051
37					
38	Vending age	→ Formalization Intent Tax	-0.062	-0.011	-0.073
39					
40					

Significant at: * $p < 0.1$; ** $p < 0.05$; and *** $p < 0.01$. (2-tailed t -test)

1 and 2: Tax morality is a reverse coded construct, hence the negative sign represents a positive correlation

Table VI: Analysis of hypothesized mediating effects

Path between two latent variables	Mediation Model with 1st dependent variable (Model B)			Mediation Model with 2nd dependent variable (Model C)			Model without Mediation (Model D)
	(DV= Formalisation Intent License)			(DV= Formalisation Intent Tax)			(Both DV's included)
	R ² =0.13			R ² =0.14			R ² =0.10, 0.11
	Direct Effects	Indirect Effects	Total Effects	Direct Effects	Indirect Effects	Total Effects	Direct Effects
Formalization Intent License → Formalization Intent Tax							0.186***

Public Sector Corruption	→ Mediator	0.150**	0.150**	0.179** *	0.179** *
Procedural Fairness	→ Mediator	-0.239***	-0.239***	- 0.221** *	- 0.221** *
Redistributive Justice	→ Mediator	-0.294***	-0.294***	- 0.218** *	- 0.218** *
Mediator	→ Formalization Intent License	-0.0140**	-0.140***		
Mediator	→ Formalization Intent Tax			-0.155**	-0.155**
Public Sector Corruption	→ Formalization Intent License	0.015	0.021	-0.01	0.033
Public Sector Corruption	→ Formalization Intent Tax			0.149**	-0.028* 0.121** 0.110*
Procedural Fairness	→ Formalization Intent License	0.103	-0.034	0.052	0.088
Procedural Fairness	→ Formalization Intent Tax			0.127*	0.034* 0.162** 0.164**
Redistributive Justice	→ Formalization Intent License	0.009	-0.041	0.012	-0.061
Redistributive Justice	→ Formalization Intent Tax			0.043	0.034* 0.077 0.135

+ $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$ (2-tailed t -test),

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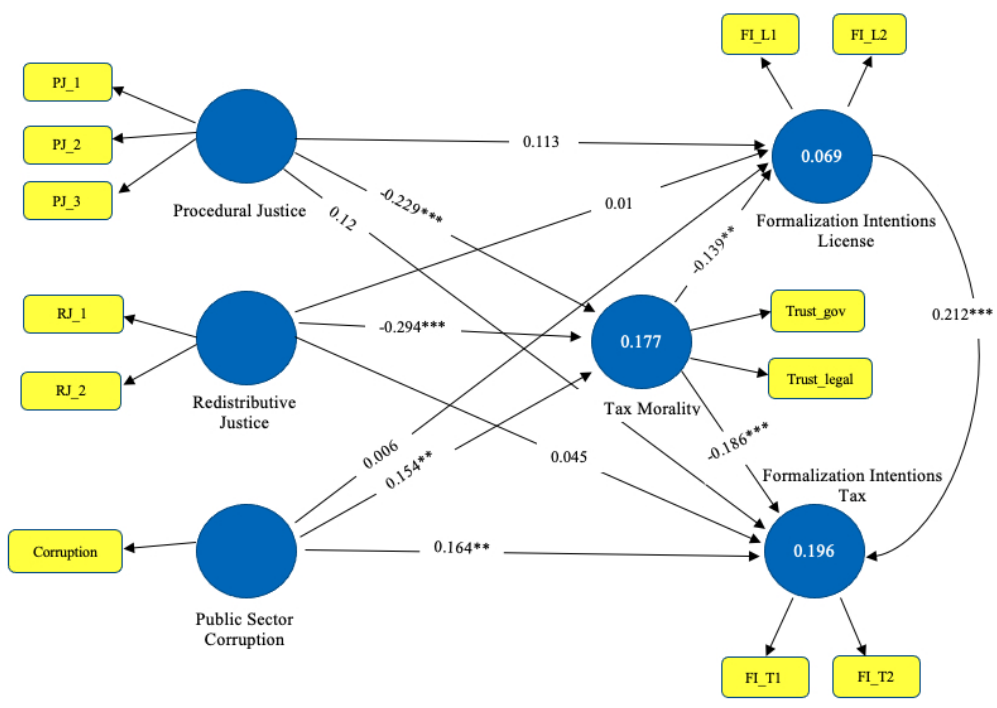


Figure 2: Structural Equation Model Diagram

279x200mm (72 x 72 DPI)

Manuscript ID IJEER-02-2022-0151 R1

"Advancing the institutional perspective on informal entrepreneurship: a study of formalisation intentions amongst street entrepreneurs"

Response to the co-editor and reviewer 1

Thank you again for seeing the potential in our paper for publication in *IJEER* and giving us a chance to further revise our manuscript. We would like to thank you for providing such clear, constructive and informative feedback.

We have thoroughly taken into account all your comments in the second revision and worked to deal with the relevant issues that have been highlighted by the co-editor and reviewer. As requested by both the co-editor and reviewer 1, we have conducted new calculations, engaged with the recent papers published in *IJEER* and cleaned up the general English syntax within the paper.

We believe that the revised paper, which we are re-submitting now is much clearer in how it outlines the contributions it seeks to make to the extant literature and knowledge. For clarity and convenience, we have outlined our response to the comments as below, with each editor and reviewer's comments and corresponding explanations of how we have dealt with the particular concern. We have outlined our responses in **BOLD**.

Co-editor's comments:

Comment: Please engage with the recent literature published in *IJEER* so that the extant discourse is reflected.

Response: Thank you for your very valuable comment. We have now duly engaged with the literature recently published in *IJEER* and referenced it in our paper at appropriate places. Please see the highlighted text in the introduction (p.2), literature review (p.8) and conclusions (p.20) sections. In particular, we have referred to the following literature from *IJEER*:

- **Baker, T., & Welter, F. (2017). Come on out of the ghetto, please!—Building the future of entrepreneurship research. *International Journal of Entrepreneurial Behavior & Research*.**
- **Sabella, A. R., and El-Far, M. T. (2019). Entrepreneurship as an everyday form of resistance: An exploration of the experiences of Palestinian women street vendors in the occupied Old City of Jerusalem. *International Journal of Entrepreneurial Behavior and Research***
- **Muhammad, N., Ullah, F., & Warren, L. (2016). An institutional perspective on entrepreneurship in a conflict environment: evidence from Pakistan. *International Journal of Entrepreneurial Behavior & Research***
- **Afreh, B., Rodgers, P., Vershinina, N., & Williams, C. C. (2019). Varieties of context and informal entrepreneurship: Entrepreneurial activities of migrant youths in rural Ghana. *International Journal of Entrepreneurial Behavior and Research*.**

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2
3 Comment: Please soften your language about sample representativeness. I could not see any
4 solid evidence in your paper suggesting this. The sampling strategy you have adopted
5 "maximum variation sampling technique" seems to be a non-probability approach. Therefore,
6 I would suggest acknowledging this in the limitations section.
7

8
9 **Response: We agree. It is now included in the limitations section as suggested. Please see**
10 **the highlighted text on pp.19-20.**
11

12 Comment: Please include a post-hoc test for common method bias.
13

14
15 **Response: The test for the common method bias was performed and included. Please see**
16 **the highlighted text on p.15.**
17

18 Comment: Your claim "Secondly, deploying the SEM technique for the first time in the
19 scholarly work of informal entrepreneurship" is not fully accurate (see references below).
20 Please revise this and refocus your novelty more around contributions to theory. I feel your
21 paper contribution could be strengthened further.
22

23
24 **Response: Thanks for this very valuable comment. We have now revised one of our**
25 **contributions both in the introduction (highlighted text on pp. 3-4) and discussion**
26 **(highlighted text on p.18) sections omitting the argument deemed inaccurate by you and**
27 **focusing more on contributions to theory.**
28

29 30 31 Reviewer 1's comments: 32

33 Comment: Extensive proofreading and required for this paper before publishing as there are
34 several mistakes especially in the highlighted text. For example, see page no. 17 second
35 paragraph.
36

37
38 **Response: The whole manuscript is thoroughly revised to remove typos and grammatical**
39 **errors. Thank you for pointing this out, indeed it needed another careful brushing**
40 **through.**
41

42 Comment: "Page 12 and 13, the values of HTMT and VIF are explained in the text but are not
43 included in the table. Revision required", I am unable to find HTMT values in Table 3.
44

45
46 **Response: HTMT values and now included in Table IV (see highlighted text on p.14).**
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